

REMARKS

Reconsideration of this application, as amended, is respectfully requested.

Claims 1-31 are currently pending in the present application. As indicated above, Claims 1, 6, 13, 21, and 27 have been amended. It is gratefully acknowledged that Claims 14-18 and 28-31 have been allowed, and that the Examiner has found allowable subject matter in dependent Claims 5-9, 20, and 22-26.

In the Office Action, the Examiner has now rejected Claims 1 and 13 under the judicially created doctrine of obviousness-type double patenting, as being unpatentable over *Park et al.* (U.S. 6,747,963 B1), Claims 1-4 and 10-13 under 35 U.S.C. §103(a) as being unpatentable over *Wang et al.* (U.S. 6,587,447), Claim 19 under 35 U.S.C. §103(a) as being unpatentable over *Wang* in view of *Padovani et al.* (U.S. 5,659,569), and Claims 21 and 27 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Padovani* in view of *Wang*.

With regard to the rejection of Claims 1 and 13 under the judicially created doctrine of obviousness-type double patenting, as being unpatentable over *Park*, the Examiner asserts that Claims 1 and 13 are not patentably distinct from Claims 1 and 6 of *Park*, because Claims 1 and 13 merely broaden the scope of Claims 1 and 6 by eliminating the elements and functions of the claims. However, it is respectfully submitted that the Examiner is incorrect.

More specifically, it is respectfully submitted that Claims 1 and 13 of the present application are distinguishable from Claims 1 and 6 of *Park*, because Claims 1 and 13 additionally recite the step of driving, *if there is no traffic data for a predetermined time period, a random position selector to determine a random gating slot position.*

Additionally, Claims 1 and 13 have been amended to recite that the method of the present invention determines a random gating slot position *using one of a scrambling code and a fixed sequence related to a corresponding gating slot group*. Accordingly, because the above-described features are not recited in Claims 1 and 6 of *Park*, it is respectfully submitted that Claims 1 and 13 are patentably distinct from Claims 1 and 6 of *Park*, and it is respectfully requested that the rejection of Claims 1 and 13, under the judicially created doctrine of obviousness-type double patenting, be withdrawn.

With regard to the rejection of Claims 1 and 13 as being unpatentable over *Wang*, the Examiner asserts that *Wang*, discloses all the recitations of Claims 1 and 13, except for determining a gating position *when there is no data to transmit on the traffic channel for a predetermined period of time*, which the Examiner asserts would be obvious to one skilled in the art. However, as the present invention teaches determining a gating slot position where control data (for example, a TPC bit) is to be transmitted according to the random pattern, which is not disclosed in *Wang*, it is respectfully submitted that the Examiner is incorrect.

More specifically, Claims 1 and 13 recite *driving, if there is no traffic data for a predetermined time period, a random position selector to determine a random gating slot position, and driving, when the mobile station receives gating information including gating start time and gating rate from the base station, a random position selector to determine a random gating slot position*, respectively. It is respectfully submitted that there is no section of *Wang* that teaches either driving a random position selector or determining a random gating position. That is, *Wang* discloses a process of implementing a signaling method wherein a particular bit from the power control bits is selected to be an indicator bit. *Wang* does not disclose how this bit is selected other than to recite that, in the preferred embodiment, “the first power control bit in a frame is utilized to indicate traffic channel status of the current frame” (Column 9, Lines 1-3). *Wang* further states that the “position of the indicator could be anywhere within the power control bits in a frame.” (Column 9, Lines 4-7). Acknowledging that “the bit may be received in error,” *Wang* goes on to teach a method to allow the

“receiver to check” the frame (Column 9, Lines 17-19). Moreover, *Wang* teaches using “two power control bits per frame” to enhance the reliability of bit transmission, the “second bit to be sent as a back-up bit to the first indicator bit.” (Column 9, Lines 62-66).

Additionally, with regard to the Examiner’s asserts that it would have been obvious to one skilled in the art to determine a gating position *when there is no data to transmit on the traffic channel for a predetermined period of time*, the Examiner asserts that *Wang* could be modified to wait a predetermined period, and asserts that one would have been motivated to wait a predetermined period of time because it is an efficient way for determining if data is present to transmit, and would make the system more reliable. However, it is respectfully submitted that the Examiner has not properly provided any sufficient reasoning as to why this would be obvious to one skilled in the art, but has instead merely stated a benefit of utilizing the present invention instead of *Wang*.

Further, as indicated above, independent Claims 1 and 13 have been amended to recite determining a random gating slot position *using one of a scrambling code and a fixed sequence related to a corresponding gating slot group*. It is respectfully submitted that this recitation is not disclosed in *Wang*.

Therefore, at least for the reason presented above, it is respectfully submitted that the Examiner is incorrect in rejecting Claims 1 and 13, and it is respectfully requested that the rejection be withdrawn.

With regard to Claim 19, the Examiner asserts that *Wang* teaches all the recitations of this claim, except for receiving gating information that indicates a gating start time in order to provide synchronization, which the Examiner asserts would be obvious to one skilled in the art, and transmitting a DPCH slot signal to form a random pattern for a predetermined duration, which the Examiner asserts is taught in *Padovani*. However, it is respectfully submitted that the Examiner is incorrect.

First, with regard to the Examiner's assertion that it would be obvious to one skilled in the art to modify *Wang* to receive gating information that indicates a gating start time in order to provide synchronization, the Examiner states that *Wang* could be modified to do this and that this modification would improve *Wang*. However, it is respectfully submitted that the Examiner has not properly provided any sufficient reasoning as to why this would be obvious to one skilled in the art, but similar to the obviousness rejection to Claims 1 and 13, has instead merely stated a benefit of utilizing the present invention instead of *Wang*.

Further, with regard to the Examiner's assertion that *Padovani* teaches transmitting a DPCCCH slot signal to form a random pattern for a predetermined duration, the Examiner has not cited a section of *Padovani* that teaches this feature. Further, it is respectfully submitted that there is not any section in that *Padovani* teaches this recitation. Accordingly, it is respectfully submitted that the Examiner is incorrect in rejecting Claim 19, and it is respectfully requested that the rejection be withdrawn.

With reference to Claims 21 and 27, the Examiner states that *Padovani* in view of *Wang* discloses all the recitations of these claims. However, in making this rejection the Examiner makes similar assertions as those made in the previous rejections. That is, the Examiner asserts it would be obvious to one skilled in the art to modify *Wang* to receive gating information that indicates a gating start time in order to provide synchronization, that *Wang* could be modified to do this, and that this modification would improve *Padovani* in view of *Wang*. However, as indicated above, it is respectfully submitted that the Examiner has not properly provided any sufficient reasoning as to why this would be obvious to one skilled in the art, but similar to the obviousness rejection of Claims 1, 13, and 19, has instead merely stated a benefit of utilizing the present invention instead of *Wang*.

Further, *Padovani* is directed to an early-to-mid 1990's CDMA system, which gated the DPDCH only, and is well known in the art. Although *Padovani* discloses gating transmissions on the

reverse DPDCH CDMA channel and further teaches that the gated on power control groups are pseudo-randomized in their position within the frame, as even admitted by the Examiner, *Padovani* does not disclose a transmission system that gates the DPCCH. Additionally, *Padovani* does not disclose a gating position selector for determining a gating slot position and for dividing the slots in each frame into a plurality of gating slot groups, each of the gating slot groups having a random gating slot position, as in Claim 21, and having the gating slot position, as in Claim 27. Moreover, *Padovani* does not disclose a gated transmission controller for controlling the DPCCH slot corresponding to the selected gating slot position as recited in Claim 21. Nor does *Padovani* disclose a gating position selector for determining a gating slot position *when no data is received for a predetermined period of time*, as recited in Claim 21.

Further, as indicated above, independent Claims 21 and 27 have been amended to recite determining a random gating slot position *using one of a scrambling code and a fixed sequence related to a corresponding gating slot group*. It is respectfully submitted that this recitation is not disclosed in *Wang* or *Padovani*.

Therefore, at least for the reason presented above, it is respectfully submitted that the Examiner is incorrect in rejecting independent Claims 21 and 27, and it is respectfully requested that the rejection be withdrawn.

Independent Claims 1, 13, 19, 21, and 27 are believed to be in condition for allowance. Without conceding the patentability per se of dependent Claims 5-12, 20 and 22-24, these are likewise believed to be allowable by virtue of their dependence on their respective amended independent Claims. Accordingly, reconsideration and withdrawal of the rejections of dependent Claims 5-12, 20 and 22-24 is respectfully requested.

Accordingly, all of the claims pending in the Application, namely, Claims 1-31, are believed to be in condition for allowance. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,



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